Report Date: 08 May 2014

Summary Report for Individual Task 052-247-1307 Ascend a Fixed Rope System Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the FLW MO/USAES foreign disclosure authority. This

Condition: You are a member of an Urban Search and Rescue (US&R) team and are given a high angle rope rescue incident scenario, a belay system, a life safety harness, brake bar rack, an anchored fixed rope system, an ascending system, carabiners and personal protective equipment (PPE). This task should not be trained in MOPP 4.

Standard: Ascend a fixed rope system in a high angle environment. Ensure that you are secured to the rope by means of ascent control device with at least two points of contact, can stop at any point in descent and rest suspended on your harness, can convert over to a descending device, and can negotiate obstacles and rappel back down to the ground.

Special Condition: None

Safety Risk: High

MOPP 4: Never

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: All required references and technical manuals will be provided by the local US&R Command.

Notes: None

Performance Steps

- 1. Don a life safety harness.
- 2. Attach a belay line to the life safety harness with a carabiner.

Note: The carabiner is attached to the belay line with a figure-eight on a bight knot.

3. Attach a brake bar rack to an extra d-ring (or equipment sling) on the life safety harness using a carabiner.

Note: The term "brake bar rack" will be referred to as "rack" throughout the rest of the task.

- 4. Attach the ascenders to main-line rope system.
 - a. Triple wrap a short prusik and attach it to the chest d-ring on your life safety harness making this the top ascender.

 Note: The short prusik will be called the top ascender.
 - b. Triple wrap the long prusik for the foot loop to the fixed rope making this the bottom foot ascender. Note: The long prusik will be called the bottom ascender.
- 5. Conduct a system safety check. (See task 031-627-2152)
- Ascend the rope.
 - a. Slide the top ascender up the rope as high as it will go.
 - b. Slide the bottom foot ascender just below the top ascender.
 - c. Stand in the bottom foot ascender loop, or "stirrup," of the long sling and put your weight on it.
 - d. Slide the top ascender as far up the main-line rope system as it will go.
 - e. Transfer weight from the bottom foot ascender to the top ascender.
 - f. Slide the bottom foot ascender underneath the top ascender again.
 - g. Repeat process until you ascend to your desired point on rope.
- 7. Perform a change-over from an ascending to a rappel operation.
 - a. Attach the rack to your waist d-ring tie in point not currently in use on your life safety harness with a carabiner.
 - b. Sit down in your harness and place your weight on the top ascending device.

CAUTION

Do not remove the rope ascenders from rope system at this time.

- c. Take your weight off of the bottom foot ascender and slide them back down the rope so there is slack in the rope between the two descenders.
- 8. Attach the rack to the main-line system rope between the two ascenders.

- a. Hold the rack in front of the body with the guide hand.
- b. Disengage all bars except the top one on the rack by sliding them one at a time toward the bottom of the rack.
- c. Squeeze the two legs of the rack together with one hand, and flip back each bar with the other hand.
- d. Pick up the rope with your brake hand and guide the rope between the two legs on the rack and across the top bar.

 Note: Do not pass them between the top bar and the bend on the rack. This results in pinching of the rope, making the descender harder to control and causing excessive wear on the rack.
 - e. Reach down below the rack, grab the rope, and pull it across the top bar away from you, pulling the slack out of it.
- f. Clip in the second bar at the bottom of the rack with the other hand, and slide it up to trap the rope between it and the top bar.
- g. Bring the free end of the rope back across the second bar pulling it so the second bar is snugged in by the force of the rope pulling against it.

Note: The rope must be on the side of the bar opposite the notch to hold the bar in place on the rack frame.

- h. Repeat the process with the remainder of the bars until all six have been clipped in.
- 9. Remove all the slack in the main-line rope system between the rack and the top ascender.
- 10. Lock off the rack.
 - a. Take the rope with your brake hand and pull it away from you to the top of the rack.
- b. Pull the rope over to the side of the rack and across the hyperbar (with your brake hand) between the rack frame and the pin at the end of the hyperbar so that the rope runs across the top bar.
 - c. Bring the rope back toward you, pulling it taut so that it locks all of the bars together.
 - d. Bring the rope through the two legs of the rack and across the bottom bar.
 - e. Pull the rope away from you, toward the anchor, in the same path as you did before to the "stop" position. Note: Pull rope firmly so all rope sections are taut and the bars locked together.
- f. Form a large bight of rope and tie a double overhand knot on the standing part of the rope just above the rack.

 Note: If you are unable to reach above the rack to tie the knot, tie the double overhand knot around the entire rack. Ensure there is no slack in the rope running over the bar, nor space between the bars.
- 11. Remove the ascenders.
 - a. Move the bottom foot ascender back up the main line rope.

Note: Only move the bottom ascender far enough so that when you put your weight on it, it removes the weight from the top ascender.

- b. Shift the weight to the bottom foot ascender and remove the weight from the top ascender.
- c. Remove the top ascender from the main-line rope system and attach it to an extra d-ring (or equipment sling).
- d. Sit down in your life safety harness so that the rack takes your weight.

- e. Remove the weight from your bottom foot ascender by lifting your foot.
- f. Remove the bottom foot ascender from the main-line rope system and attach it to an extra d-ring (or equipment sling).
- 12. Unlock the rack.

Note: When unlocking the rack always keep a firm grip on the rope and allow no slack in the brake end of the rope.

- a. Untie the overhand knot, while maintaining constant tension on the rope with your brake hand.
- b. Slowly lower the rope to return to the "stop" position.
- c. Resume your guide hand's normal position of cradling the bars.
- 13. Give the commands "on belay" and "on rappel".
- 14. Rappel to the ground in a controlled manner. (See task 052-247-1308)
- 15. Remove the rack from the main-line rope system. (See task 052-247-1308)
- 16. Give the commands "off belay" and "off rappel".

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all measures are passed (P). Score the Soldier a NO-GO if any measure is failed (F). If the Soldier fails any measure, show him how to do it correctly.

Evaluation Preparation: Setup: Provide the Soldier with all the items listed in the conditions.

Brief the Soldier: Tell the Soldier to Ascend a Fixed Rope System

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Donned a life safety harness.			
2. Attached a belay line to the life safety harness with a carabiner.			
3. Attached a brake bar rack to an extra d-ring (or equipment sling) on the life safety harness using a carabiner.			
4. Attached the ascenders to the main-line rope system.			
5. Conducted a system safety check. (See task 031-627-2152)			
6. Ascended the rope.			
7. Performed a change-over from an ascending to a rappel operation.			
8. Attached the rack to the main-line rope system between the two ascenders.			
9. Removed all the slack in the main-line rope system between the rack and the top ascender.			
10. Locked off the rack.			
11. Removed the ascenders.			
12. Unlocked the rack.			
13. Gave the commands "on belay" and "on rappel".			
14. Rappelled to the ground in a controlled manner. (See task 052-247-1308)			
15. Removed the rack from the main-line rope system. (See task 052-247-1308)			
16. Gave the commands "off belay" and "off rappel"			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
		International Fire Service Training Association (IFSTA) Fire Service Search and Rescue, 7th Edition	No	No
		IFSTA Technical Rescue for Structural Collapse, 1st Edition	No	No
		Standard for Rescue Technician Professional Qualifications	Yes	Yes
		National Fire Protection Association Standards and Regulations	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks: None

Supporting Individual Tasks:

Task Number	Title	Proponent	Status
052-247-1303	Belay a Falling Load	052 - Engineer (Individual)	Approved
031-627-2153	Operate a Belay System	031 - CBRN (Individual)	Approved
052-247-1304	Construct a Fixed Rope System	052 - Engineer (Individual)	Analysis
031-627-2151	Construct a Belay System	031 - CBRN (Individual)	Approved
052-247-1302	Construct a Simple Rope Mechanical Advantage System for Rope Rescues	052 - Engineer (Individual)	Reviewed
052-247-1308	Rappel a Fixed Rope System	052 - Engineer (Individual)	Approved
052-247-1306	Construct a Compound Rope Mechanical Advantage System for Rope Rescues	052 - Engineer (Individual)	Reviewed
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Reviewed

Supported Individual Tasks:

Task Number	Title	Proponent	Status
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Reviewed
052-247-1304	Construct a Fixed Rope System	052 - Engineer (Individual)	Analysis

Supported Collective Tasks:

Task Number	Title	Proponent	Status
05-3-8014	Perform a Structural Collapse Rescue Operation	05 - Engineers (Collective)	Approved
05-3-8011	Perform Rope Rescue Operations	05 - Engineers (Collective)	Approved
05-3-8012	Perform Trench Rescue Operations	05 - Engineers (Collective)	Approved
05-3-8013	Perform Confined Space Rescue Operations	05 - Engineers (Collective)	Approved